

#5

PCT09

RAW SEQUENCE LISTING

DATE: 10/30/2001

PATENT APPLICATION: US/09/806,536

TIME: 11:22:23

Input Set : N:\Crf3\RULE60\09806536.txt

Output Set: N:\CRF3\10302001\I806536.raw

ENTERED

3 <110> APPLICANT: INCYTE PHARMACEUTICALS, INC.
 4 LAL, Preeti
 5 GUEGLER, Karl J.
 6 GORGONE, Gina A.
 7 CORLEY, Neil C.
 8 BAUGHN, Mariah R.
 9 TANG, Y. Tom
 10 HILLMAN, Jennifer L.
 11 BANDMAN, Olga
 12 AZIMZAI, Yalda
 13 AU-YOUNG, Janice
 14 YUE, Henry
 15 LU, Dyung Aina M.
 16 YANG, Junming
 18 <120> TITLE OF INVENTION: OXIDOREDUCTASE MOLECULES
 20 <130> FILE REFERENCE: PF-0610 PCT
 22 <140> CURRENT APPLICATION NUMBER: 09/806,536
 23 <141> CURRENT FILING DATE: 2001-03-28
 25 <150> PRIOR APPLICATION NUMBER: PCT/US99/23434
 26 <151> PRIOR FILING DATE: 1999-10-06
 28 <160> NUMBER OF SEQ ID NOS: 30
 30 <170> SOFTWARE: PERL Program
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 280
 34 <212> TYPE: PRT
 35 <213> ORGANISM: Homo sapiens
 37 <220> FEATURE:
 38 <221> NAME/KEY: misc_feature
 39 <223> OTHER INFORMATION: Incyte ID No.: 000746CD1
 41 <400> SEQUENCE: 1
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 43 1 5 10 15
 44 Leu Leu Leu Trp Gly Ala Pro Trp Thr His Gly Arg Arg Ser Asn
 45 20 25 30
 46 Val Arg Val Ile Thr Asp Glu Asn Trp Arg Glu Leu Leu Glu Gly
 47 35 40 45
 48 Asp Trp Met Ile Glu Phe Tyr Ala Pro Trp Cys Pro Ala Cys Gln
 49 50 55 60
 50 Asn Leu Gln Pro Glu Trp Glu Ser Phe Ala Glu Trp Gly Glu Asp
 51 65 70 75
 52 Leu Glu Val Asn Ile Ala Lys Val Asp Val Thr Glu Gln Pro Gly
 53 80 85 90
 54 Leu Ser Gly Arg Phe Ile Ile Thr Ala Leu Pro Thr Ile Tyr His
 55 95 100 105
 56 Cys Lys Asp Gly Glu Phe Arg Arg Tyr Gln Gly Pro Arg Thr Lys
 57 110 115 120
 58 Lys Asp Phe Ile Asn Phe Ile Ser Asp Lys Glu Trp Lys Ser Ile

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59          125          130          135
60 Glu Pro Val Ser Ser Trp Phe Gly Pro Gly Ser Val Leu Met Ser
61          140          145          150
62 Ser Met Ser Ala Leu Phe Gln Leu Ser Met Trp Ile Arg Thr Cys
63          155          160          165
64 His Asn Tyr Phe Ile Glu Asp Leu Gly Leu Pro Val Trp Gly Ser
65          170          175          180
66 Tyr Thr Val Phe Ala Leu Ala Thr Leu Phe Ser Gly Leu Leu Leu
67          185          190          195
68 Gly Leu Cys Met Ile Phe Val Ala Asp Cys Leu Cys Pro Ser Lys
69          200          205          210
70 Arg Arg Arg Pro Gln Pro Tyr Pro Tyr Pro Ser Lys Lys Leu Leu
71          215          220          225
72 Ser Glu Ser Ala Gln Pro Leu Lys Lys Val Glu Glu Glu Gln Glu
73          230          235          240
74 Ala Asp Glu Glu Asp Val Ser Glu Glu Glu Ala Glu Ser Lys Glu
75          245          250          255
76 Gly Thr Asn Lys Asp Phe Pro Gln Asn Ala Ile Arg Gln Arg Ser
77          260          265          270
78 Leu Gly Pro Ser Leu Ala Thr Asp Lys Ser
79          275          280
84 <210> SEQ ID NO: 2
85 <211> LENGTH: 166
86 <212> TYPE: PRT
87 <213> ORGANISM: Homo sapiens
89 <220> FEATURE:
90 <221> NAME/KEY: misc_feature
91 <223> OTHER INFORMATION: 'Incyte ID No.: 2472577CD1
93 <400> SEQUENCE: 2
94 Met Gln Glu Ile Asn Gln Asn Leu Ala Glu Glu Ala Gly Leu Asn
95 1 5 10 15
96 Ile Thr His Ile Cys Leu Pro Pro Asp Ser Ser Glu Ala Glu Ile
97 20 25 30
98 Ile Asp Glu Ile Leu Lys Ile Asn Glu Asp Thr Arg Val His Gly
99 35 40 45
100 Leu Ala Leu Gln Ile Ser Glu Asn Leu Phe Ser Asn Lys Val Leu
101 50 55 60
102 Asn Ala Leu Lys Pro Glu Lys Asp Val Asp Gly Val Thr Asp Ile
103 65 70 75
104 Asn Leu Gly Lys Leu Val Arg Gly Asp Ala His Glu Cys Phe Val
105 80 85 90
106 Ser Pro Val Ala Lys Ala Val Ile Glu Leu Leu Glu Lys Ser Val
107 95 100 105
108 Gly Val Asn Leu Asp Gly Lys Lys Ile Leu Val Val Gly Ala His
109 110 115 120
110 Gly Ser Leu Glu Ala Ala Leu Gln Cys Leu Phe Gln Arg Lys Gly
111 125 130 135
112 Ser Met Thr Met Ser Ile Gln Trp Lys Thr Arg Gln Leu Gln Ser
113 140 145 150

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114 Lys Thr Glu Ser Arg Ser Val Thr Arg Leu Glu Cys Arg Arg Val
115                               155                               160                               165
116 Ile
121 <210> SEQ ID NO: 3
122 <211> LENGTH: 319
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens
126 <220> FEATURE:
127 <221> NAME/KEY: misc_feature
128 <223> OTHER INFORMATION: Incyte ID No.: 2160405CD1
130 <400> SEQUENCE: 3
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133 Val Ile Gly Arg Ser Trp Ala Met Leu Phe Ala Ser Gly Gly Phe
134                               20                               25                               30
135 Gln Val Lys Leu Tyr Asp Ile Glu Gln Gln Gln Ile Arg Asn Ala
136                               35                               40                               45
137 Leu Glu Asn Ile Arg Lys Glu Met Lys Leu Leu Glu Gln Ala Gly
138                               50                               55                               60
139 Ser Leu Lys Gly Ser Leu Ser Val Glu Glu Gln Leu Ser Leu Ile
140                               65                               70                               75
141 Ser Gly Cys Pro Asn Ile Gln Glu Ala Val Glu Gly Ala Met His
142                               80                               85                               90
143 Ile Gln Glu Cys Val Pro Glu Asp Leu Glu Leu Lys Lys Lys Ile
144                               95                               100                              105
145 Phe Ala Gln Leu Asp Ser Ile Ile Asp Asp Arg Val Ile Leu Ser
146                               110                              115                              120
147 Ser Ser Thr Ser Cys Leu Met Pro Ser Lys Leu Phe Ala Gly Leu
148                               125                              130                              135
149 Val His Val Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro
150                               140                              145                              150
151 Tyr Tyr Ile Pro Leu Val Glu Leu Val Pro His Pro Glu Thr Ala
152                               155                              160                              165
153 Pro Thr Thr Val Asp Arg Thr His Ala Leu Met Lys Lys Ile Gly
154                               170                              175                              180
155 Gln Cys Pro Met Arg Val Gln Lys Glu Val Ala Gly Phe Val Leu
156                               185                              190                              195
157 Asn Arg Leu Gln Tyr Ala Ile Ile Ser Glu Ala Trp Arg Leu Val
158                               200                              205                              210
159 Glu Glu Gly Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser
160                               215                              220                              225
161 Glu Gly Leu Gly Met Arg Tyr Ala Phe Ile Gly Pro Leu Glu Thr
162                               230                              235                              240
163 Met His Leu Asn Ala Glu Gly Met Leu Ser Tyr Cys Asp Arg Tyr
164                               245                              250                              255
165 Ser Glu Gly Ile Lys His Val Leu Gln Thr Phe Gly Pro Ile Pro
166                               260                              265                              270
167 Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn Gln Asp Met Cys
168                               275                              280                              285

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Input Set : N:\Crf3\RULE60\09806536.txt

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169 Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala Arg Arg Gln
170                               290                295                300
171 Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys Ser Gln
172                               305                310                315
173 Val Gln Pro Gln
174 <210> SEQ ID NO: 4
175 <211> LENGTH: 318
176 <212> TYPE: PRT
177 <213> ORGANISM: Homo sapiens
178 <220> FEATURE:
179 <221> NAME/KEY: misc_feature
180 <223> OTHER INFORMATION: Incyte ID No.: 2591695CD1
181 <400> SEQUENCE: 4
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183   1                5                10                15
184 Arg Ala Val Trp Leu Thr Leu Thr Ala Ala Phe Leu Leu Thr Leu
185                20                25                30
186 Leu Leu Gln Leu Leu Pro Pro Gly Leu Leu Pro Gly Cys Ala Ile
187                35                40                45
188 Phe Gln Asp Leu Ile Arg Tyr Gly Lys Thr Lys Cys Gly Glu Pro
189                50                55                60
190 Ser Arg Pro Ala Ala Cys Arg Ala Phe Asp Val Pro Lys Arg Tyr
191                65                70                75
192 Phe Ser His Phe Tyr Ile Ile Ser Val Leu Trp Asn Gly Phe Leu
193                80                85                90
194 Leu Trp Cys Leu Thr Gln Ser Leu Phe Leu Gly Ala Pro Phe Pro
195                95                100               105
196 Ser Trp Leu His Gly Leu Leu Arg Ile Leu Gly Ala Ala Gln Phe
197                110               115               120
198 Gln Gly Gly Glu Leu Ala Leu Ser Ala Phe Leu Val Leu Val Phe
199                125               130               135
200 Leu Trp Leu His Ser Leu Arg Arg Leu Phe Glu Cys Leu Tyr Val
201                140               145               150
202 Ser Val Phe Ser Asn Val Met Ile His Val Val Gln Tyr Cys Phe
203                155               160               165
204 Gly Leu Val Tyr Tyr Val Leu Val Gly Leu Thr Val Leu Ser Gln
205                170               175               180
206 Val Pro Met Asp Gly Arg Asn Ala Tyr Ile Thr Gly Lys Asn Leu
207                185               190               195
208 Leu Met Gln Ala Arg Trp Phe His Ile Leu Gly Met Met Met Phe
209                200               205               210
210 Ile Trp Ser Ser Ala His Gln Tyr Lys Cys His Val Ile Leu Gly
211                215               220               225
212 Asn Leu Arg Lys Asn Lys Ala Gly Val Val Ile His Cys Asn His
213                230               235               240
214 Arg Ile Pro Phe Gly Asp Trp Phe Glu Tyr Val Ser Ser Pro Asn
215                245               250               255
216 Tyr Leu Ala Glu Leu Met Ile Tyr Val Ser Met Ala Val Thr Phe
217                260               265               270

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Input Set : N:\Crf3\RULE60\09806536.txt

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```

224 Gly Phe His Asn Leu Thr Trp Trp Leu Val Val Thr Asn Val Phe
225                      275                      280                      285
226 Phe Asn Gln Ala Leu Ser Ala Phe Leu Ser His Gln Phe Tyr Lys
227                      290                      295                      300
228 Ser Lys Phe Val Ser Tyr Pro Lys His Arg Lys Ala Phe Leu Pro
229                      305                      310                      315
230 Phe Leu Phe
233 <210> SEQ ID NO: 5
234 <211> LENGTH: 330
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
238 <220> FEATURE:
239 <221> NAME/KEY: misc_feature
240 <223> OTHER INFORMATION: Incyte ID No.: 474100CD1
242 <400> SEQUENCE: 5
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244   1                      5                      10                      15
245 Pro Asn Arg Arg Val Leu Val Thr Gly Ala Thr Gly Leu Leu Gly
246                      20                      25                      30
247 Arg Ala Val His Lys Glu Phe Gln Gln Asn Asn Trp His Ala Val
248                      35                      40                      45
249 Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn
250                      50                      55                      60
251 Leu Leu Asp Ser Asn Ala Val His His Ile Ile His Asp Phe Gln
252                      65                      70                      75
253 Pro His Val Ile Val His Cys Ala Ala Glu Arg Arg Pro Asp Val
254                      80                      85                      90
255 Val Glu Asn Gln Pro Asp Ala Ala Ser Gln Leu Asn Val Asp Ala
256                      95                      100                     105
257 Ser Gly Asn Leu Ala Lys Glu Ala Asp Phe Phe Phe Phe Phe Val
258                      110                     115                     120
259 Ala Ala Val Gly Ala Phe Leu Ile Tyr Ile Ser Ser Asp Tyr Val
260                      125                     130                     135
261 Phe Asp Gly Thr Asn Pro Pro Tyr Arg Glu Glu Asp Ile Pro Ala
262                      140                     145                     150
263 Pro Leu Asn Leu Tyr Gly Lys Thr Lys Leu Asp Gly Glu Lys Ala
264                      155                     160                     165
265 Val Leu Glu Asn Asn Leu Gly Ala Ala Val Leu Arg Ile Pro Ile
266                      170                     175                     180
267 Leu Tyr Gly Glu Val Glu Lys Leu Glu Glu Ser Ala Val Thr Val
268                      185                     190                     195
269 Met Phe Asp Lys Val Arg Phe Ser Asn Lys Ser Ala Asn Met Asp
270                      200                     205                     210
271 His Trp Gln Gln Arg Phe Pro Thr His Val Lys Asp Val Ala Thr
272                      215                     220                     225
273 Val Cys Arg Gln Leu Ala Glu Lys Arg Met Leu Asp Pro Ser Ile
274                      230                     235                     240
275 Lys Gly Thr Phe His Trp Ser Gly Asn Glu Gln Met Thr Lys Tyr
276                      245                     250                     255

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/806,536

DATE: 10/30/2001

TIME: 11:22:24

Input Set : N:\Crf3\RULE60\09806536.txt

Output Set: N:\CRF3\10302001\I806536.raw

L:1481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28